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>>>W: KWIC option is not available in file(s): 399
 3/3,K/1 (Item 1 from file: 24) Links
     Fulltext available through:
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CSA Life Sciences Abstracts
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                      IP Accession No: 8320169
0003292686
Inhibition of Airway Allergic Disease by Co-Administration of Flagellin with
Allergen
Lee, Shee Eun; Koh, Youngil I; Kim, Mi-Kwang; Kim, Young Ran; Kim, Soo Young; Nam, Jong Hee; Choi, Yoo Duk; Bae, Soo Jang; Ko, Young Jong; Ryu, Hwa-Ja; Koh, Jeong Tae; Choy, Hyon E; Rhee, Joon Haeng Chonnam National University, 300 Yongbong-Dong, Puk-Ku, Gwangju, 500-757, South Korea, [mailto:selee@Chonnam.ac.kr] Journal of Clinical Immunology, v 28, n 2, p 157-165, March 2008
Publication Date: 2008
Publisher: Springer-Verlag, Tiergartenstrasse 17 Heidelberg 69121 Germany,
[mailto:subscriptions@springer.del. [URL:http://www.springer.de/]
Document Type: Journal Article
Record Type: Abstract
Language: English
Summary Language: English
ISSN: 0271-9142
File Segment: Immunology Abstracts
Inhibition of Airway Allergic Disease by Co-Administration of Flagellin with
Allergen
 ..Bae. Soo Jang: Ko. Young Jong: Ryu. Hwa-Ja: Koh. Jeong Tae: Chov. Hyon E: Rhee.
Joon Haeng
Abstract:
Bacterial flagellin, which activates Toll-like receptor 5 and cytosolic pattern
recognition receptor Ipaf, has a strong immunomodulatory activity. In the present study, we examined whether intranasal co-administration of flagellin with allergen could modulate established airway hyperresponsiveness and ThZ response using an ovalbumin (OVA)-sensitized mouse model. Balb/c mice sensitized with OVA were treated
with OVA-flagellin (FlaB) mixture three times at 1-week intervals. Seven days after
the final OVA-FlaB.....airway eosinophilic inflammation, and OVA-specific Th2 cytokine productions in splenocytes. These results indicate that flagellin
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có-administered with allergen cán modulate airway inflammatory response through
Page 3

flagellin.txt

inhibition of Th2 responses, and flagellin can be considered as a component for allergen-specific immunotherapy.

Descriptors: Allergens; Allergic diseases; Animal models; Cytokines; Flagellin; Helper cells; Immunotherapy; Inflammation; Inhalation; Lymphocytes T; Ovalbumin; Pattern recognition; Respiratory tract; Respiratory tract diseases... Identifies

3/3,K/2 (Item 2 from file: 24) Links
Fulltext available through: STIC Full Text Retrieval Options
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0003181896 IP Accession No: 8039522
Stimulation by TLRS Modulates Osteoclast Differentiation through STAT1/IFN- beta

Ha, Hyunil; Lee, Jong-Ho; Kim, Ha-Neui; Kwak, Han Bok; Kim, Hyun-Man; Lee, Shee Eun; Rhee, Joon Haeng; Kim, Hong-Hee; Lee, Zang Hee Department of Cell and Developmental Biology, Dental Research Institute, School of Dentistry, Seoul National University, Seoul. Research Institute of Vibrio Infection and Genome Research Center for Enteropathogenic Bacteria, Chonnam National University Medical School, Gwangju, Republic of Korea

Journal of Immunology v 180 n 3 n 1882-1889 February 1 2008

Journal of Immunology , v 180 , n 3 , p 1382-1389 , February 1, 2008 Publication Date: 2008

Publisher: American Association of Immunologists, 9650 Rockville Pike Bethesda MD 20814-3998 USA, [URL:http://www.jimmunol.org/]

Document Type: Journal Article Record Type: Abstract Language: English Summary Language: English ISSN: 0022-1767 File Segment: Immunology Abstra

File Segment: Immunology Abstracts; Calcium & Calcified Tissue Abstracts ...Lee, Jong-Ho; Kim, Ha-Neui; Kwak, Han Bok; Kim, Hyun-Man; Lee, Shee Eun; Rhee, Joon Haeng; Kim, Hong-Hee; Lee, Zang Hee

Abstract:

The effects of flagellin, a specific microbial ligand of TLR5, on the receptor activator of NF- kappa B ligand (RANKL)-stimulated osteoclastogenesis. Flagellin suppressed RANKL induction of c-Fos protein expression in bone marrow-derived macrophages without affecting,expression. Ectopic overexpression of c-Fos and a constitutively active form of NFACI reversed the flagellin was mediated by IFN- beta production. Flagellin stimulated IFN- beta expression and release in bone marrow-derived macrophages, and IFN- beta -neutralizing Ab prevented release in bone marrow-derived macrophages, and IFN- beta -neutralizing Ab prevented release in bone marrow-derived macrophages, and IFN- beta -neutralizing Ab prevented release in bone flagellin-induced c-Fos down-regulation and the anti-osteoclastogenic effect. IFN-beta gene induction by flagellin, LPS, or RANKL was dependent on STATI activation. Treatment with flagellin or RANKL stimulated STATI activation, and STATI deficiency or the JAK2 inhibitor AG490 dramatically prevented IFN- beta induction in response to flagellin or RANKL. In addition, STATI deficiency abolished the anti-osteoclastogenic effect induced by flagellin or LPS. In contrast, flagellin stimulated osteoclast differentiation in cocultures of osteoblasts and bone marrow cells without inducing IFN- beta...

Descriptors: Antibodies; Bone marrow; Flagellin; Janus kinase 2; Lipopolysaccharides; Macrophages; Molecular modelling; Monocytes; NF- Kappa B protein; Osteoblastogenesis; Osteoblasts; Osteoclastogenesis... Identifies:

3/3,K/3 (Item 3 from file: 24) Links Fulltext available through: STIC Full Text Retrieval Options Page 4

A Bacterial Flagellin, Vibrio vulnificus FlaB, Has a Strong Mucosal Adjuvant

Activity To Induce Protective Immunity Lee, Shee Eun; Kim, Soo Young; Jeong, Byung Chul; Kim, Young Ran; Bae, Soo Jang; Ahn, Ouk Seon, Lee, Je-Jung; Song, Ho-Chun; Kim, Jung Mogg; Choy, Hyon E; Chung, Sun Sik; Kweon, Mi-Na; Rhee, Joon Haeng Research Institute of Vibrio Infection and SIK; Kweon, Mi-Na; Rhee, Joon Haeng Research Institute of Vibrio Infection and Genome Research Center for Enteropathogenic Bacteria. National Research Laboratory of Molecular Microbial Pathogenesis and Department of Microbiology, Chonnam National University Medical School, Gwangju 501-746, South Korea. Department of Dental Pharmacology, Chonnam Dental Research Institute, College of Dentistry, Chonnam National University, Gwangju 500-757, South Korea. Departments of Internal Medicine. Nuclear Medicine, Chonnam National University Hwasun Hospital, 160 Ilsim-ri, Hwasoon, Chonnam 519-809, South Korea. Department of Microbiology, Hanyang University College of Medicine, Seoul 133-791, South Korea Mucosal Immunology Section, International Vaccine Institute, Seoul 151-818, South Korea University College of Medicine, South South Korea Nucosal Immunology Section, International Vaccine Institute, Seoul 151-818, South Korea Publication Date: 2006
Publisher: American Society for Microbiology, 1752 N. Stroot N. W. Machineton D. Co.

Publisher: American Society for Microbiology, 1752 N Street N.W. Washington, DC

Document Type: Journal Article Record Type: Abstract Language: English Summary Language: English ISSN: 0019-9567

20036 USA, [URL:http://www.asm.org/]

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0002786711

IP Accession No: 6576963

Electronic Issn: 1098-5522 File Segment: Immunology Abstracts; Bacteriology Abstracts (Microbiology B) A Bacterial Flagellin, Vibrio vulnificus FlaB, Has a Strong Mucosal Adjuvant Activity To Induce Protective Immunity

..Song, Ho-Chun; Kim, Jung Mogg; Choy, Hyon E; Chung, Sun Sik; Kweon, Mi-Na; Rhee, Joon Haeng

Abstract:

Flagellin, the structural component of flagellar filament in various locomotive Flagelin, the structural component of flageliar filament in various locomotive bacteria, is the ligand for foll....this study, we show the highly potent mucosal adjuvant activity of a vibrio vulnificus major flagellin (FlaB). Using an intranasal immunization mouse model, we observed that coadministration of the flagellin with tetanus toxoid (TT) induced significantly enhanced TT-specific immunoglobulin A (IgA) responses in both....in the number of TLRS-expressing cells in cervical lymph nodes. These results indicate that flagellin would serve as an efficacious mucosal adjuvant inducing protective immune responses through TLR5 activation.

Descriptors: Flagellin; Adjuvants; Toll-like receptors; Lymph nodes; Immunoglobulin A; Epithelial cells; Filaments; NF- Kappa B protein... Identifiers:

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>>>W: Duplicate detection is not supported for File 393.
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Records from unsupported files will be retained in the RD set.
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 6/3,K/1 (Item 1 from file: 393)
Beilstein Database - Abstracts
(C) 2008 Bellstein GmbH. All rights reserved.
Bellstein Abstract Id: 6505604
Title: Inactivation of vibrio vulnificus hemolysin by oligomerization but not
proteolysis
                                      Record Type: Abstract
Document Type: Journal
Author: Shin, Sung-Heui; Sun, Hui-Yu; Choi, Mi-Hwa; Park, Ra-Young; Bai, Young-Hoon
; Kim, Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Shee-Eun; Rhee, Joon-Haeng
Citation: Biol; Pharm. Bull. (2005) Series: 28-7, 1294 – 1297 CODEN: BPBLEO
Language: English
Abstract Language: English
Author: ...Park, Ra-Young, Bai, Young-Hoon; Kim, Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Shee-Eun; Rhee, Joon-Haeng
Patent Assignee:
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    Fulltext available through:
                                            STIC Full Text Retrieval Options
CA SEARCH(R)
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                       CA: 145(4)60561f
                                                         JOURNAL
Suppression and inactivation of Vibrio vulnificus hemolysin in cirrhotic ascites, a
human ex vivo experimental system
Author: Choi, Mi-Hwa; Park, Ra-Young; Sun, Hui-Yu; Kim, Choon-Mee; Bai, Young-Hoon;
Lee, Shee-Eun; Kim, Soo-Young; Kim, Young-Ran; Rhee, Joon-Haeng; Shin, Sung-Heui
Location: Research Center for Resistant cells, Chosun University Medical School,
Gwangju, S. Korea
Journal: FEMS Immunol. Med. Microbiol.
Date: 2006
Volume: 47 Number: 2 Pages: 226-232
CODEN: FIMIFY
TSSN: 0928-8244
Language: English
Publisher: Blackwell Publishing Ltd.
 6/3,K/3 (Item 2 from file: 399) Links
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144407846
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                                                           JOURNAL
Thattivation of Vibrio vulnifficus hemolysin by Oligomerization but not proteolysis Author: Shin, Sung-Heui; Sun, Hui-Vu; Choi, Mi-Hwa; Park, Ra-Young; Bai, Young-Hoo; Kim, Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Shee-Eun; Rhee, Joon-Haeng
Location: Research Center for Resistant Cells, Chosun University Medical School, Gwanglu, 501-759, S. Korea
Journal; Biol. Pharm. Bull.
Date: 2005
Volume: 28 Number: 7 Pages: 1294-1297
CODEN: BPBLEO
ISSN: 0918-6158
Language: English
Publisher: Pharmaceutical Society of Japan
 6/3,K/4 (Item 3 from file: 399) Links
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138283805
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Effect of salinity, temperature, and glucose on the production of Vibrio vulnificus
hemolvsin
Author: Kim, Hyun-Soo; Shin, Sung-Heui; Park, Hae-Ryoung; Lee, Shee-Eun; Kim,
Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Hyun-Chul; Chung, Sun-Sik; Rhee,
Joon-Haeng
Location: Department of Microbiology, Chonnam National University Medical School,
Kwangju, 501-746, S. Korea
Journal: J. Bacteriol. Virol.
Date: 2002
Volume: 32 Number: 4 Pages: 355-365
CODEN: JBVOAH
ISSN: 1598-2467
Language: English
Publisher: Journal of Bacteriology and Virology
 6/3,K/5 (Item 4 from file: 399) Links
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CA SEARCH(R)
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                   CA: 123(1)6941n
                                              JOURNAL
A study on the pathogenetic activity of the protease and hemolysin produced by
Vibrio vulnificus. I. Biological properties of the hemolysin produced by Vibrio
vulnificus
Author: Rhee, Joon-Haeng; Lee, Shee-Eun; Kwon, Hyoung-Cheol; Chang, Heung-Shik; Ryu,
Phil-Youl; Chung, Sun-Sik
Location: Medical School, Chonnam National University, Kwangju, 501-190, S. Korea
Journal: Taehan Misaengmul Hakhoechi
Date: 1994
Volume: 29 Number: 5 Pages: 381-98
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>>>W: KWIC option is not available in file(s): 399 19/3,K/1 (Item 1 from file: 34) Links
Fulltext available through:
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10563749 Genuine Article#: 542PB No. References: 75
A two-component regulator induces the transmission phenotype of stationary-phase
Legionella pneumophila
Author: Hammer BK; Tateda ES; Swanson MS (REPRINT)
Corporate Source: Univ Michigan,Sch Med, Dept Microbiol & Immunol,6734 Med Sci Bldg
2/Ann Arbor//MI/48109 (REPRINT); Univ Michigan,Sch Med, Dept Microbiol & Immunol,Ann
Arbor/MI/48109
Journal: MOLECULAR MICROBIOLOGY , 2002 , V 44 ISSN: 0950-382x Publication date: 20020400
                                                           V 44 , N1 ( APR ) , P 107-118
Publisher: BLACKWELL PUBLISHING LTD , P O BOX 88, OSNEY MEAD, OXFORD OX2 ONE, OXON,
ENGLAND
Language: English
                           Document Type: ARTICLE ( ABSTRACT AVAILABLE )
Abstract: ...proficient at both replication and transmission. In laboratory
cultures, as nutrients become scarce a stringent response-like pathway coordinates exit from the exponential growth phase with induction of traits correlated with virulence, including motility. A screen for mutants that express the flagellin gene poorly identified five activators of virulence: LetA/LetS, a two-component regulator
homologous to GacA/GacS of Pseudomonas and SirA/BarA of Salmonella; the stationary-phase sigma factor RpoS; the flagellar sigma factor FliA; and a new
Jocus, lete. unlike wild type, post-exponential-phase leta.....the exponential phase, but only wild type converted to the fully virulent form. In contrast, intracellular replication was independent of leta, lets, lete or fila. Together,
the data indicate that, as...
Identifiers-- ...VIRULÉNCE GENE-EXPRESSION; SYRINGAE PV SYRINGAE; ESCHERICHIA-COLI;
PSEUDOMONAS-FLUORESCENS: INTRACELLULAR GROWTH: MYXOCOCCUS-XANTHUS: VIBRIO-CHOLERAE;
2-COMPONENT REGULATORS; SALMONELLA- TYPHIMURIÚM; RESPONSE-REGULATÓR
 19/3,K/2 (Item 2 from file: 34) Links
    Fulltext available through:
                                               STIC Full Text Retrieval Options
SciSearch(R) Cited Ref Sci
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02569707 Genuine Article#: LM260 No. References: 52
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A PHOP-REPRESSED GENE PROMOTES SALMONELLA-TYPHIMURIUM INVASION OF EPITHELIAL-CELLS Author: BEHLAU I: MILLER SI Corporate Source: MASSACHUSETTS GEN HOSP, INFECT DIS UNIT/BOSTON//MA/02114; HARVARD Page 11

02569707

UNIV.SCH MED/BOSTON//MA/02115 Journal: JOURNAL OF BACTERIOLOGY , 1993 , V 175 , N14 (JUL) , P 4475-4484 ISSN: 0021-9193

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

A PHOP-REPRESSED GENE PROMOTES SALMONELLA-TYPHIMURIUM INVASION OF EPITHELIAL-CELLS

Abstract: The Salmonella typhimurium transcriptional regulators, PhoP/PhoQ, induce phop-activated gene (pag) expression to promote virulence and intracellular survival within macrophages. This response to the macrophage intracellular environment is within macrophages. This response to the macrophage intracellular environment is simulated by phor/phoc constitutive mutations (phenotype Phor(c)) that increase the expression....regulon. One prg locus, prgH, was demonstrated to contribute to mouse virulence by both the oral and the intraperitoneal routes. prgH was located at 59 min on the Salmonella chromosome, a region where other genes essential to invasion of epithelial cells are clustered. The... that result in a hyperinvasive or hd phenotype. Both PrgH and Phor(c) mutant S. typhimurium were found to be defective in induction of endocytosis by Madin-Darby canine kidney (MDCk....mutant bacteria was complemented by plasmids containing prgH (hil) DNA. Therefore, two virulence properties of Salmonella species, induction of endocytosis by epithelial cells and survival within macrophages, are oppositely modulated by... Tdentifiers— VTRETICHOLERE VTRUE MORE DETERMINANTS: ESCHERICHIA-COLT. DNA Identifiers-- ... VIBRIO-CHOLERAE; VIRULENCE DETERMINANTS; ESCHERICHIA-COLI; DNA FRAGMENTS; MACROPHAGES; MUTATIONS; PROTEINS; PHOSPHATASES; CONSTRUCTION; RESISTANCE

Research fronts: ...GENE; CDNA FOR STIMULATORY GDP/GTP EXCHANGE PROTEIN; EXPRESSION OF MESSENGER-RNA) 91-5452 001 (LISTERIA- MONOCYTOGENES VIRULENCE FACTORS; BACTERIAL ENTRY; HOST-CELLS INVITRO; HEAT-SHOCK PROTEINS)

91-8074 001 (FLAGELLIN SYNTHESIS IN SALMONELLA-TYPHIMURIUM: TRYPTOPHAN-SPECIFIC PERMEASE OF ESCHERICHIA-COLI K-12; RFB REGION; TRP PROMOTER; MOLECULAR MECHANISM) Cited References:

19/3.K/3 (Item 1 from file: 370) Links Science (c) 1999 AAAS. All rights reserved.

00500653 (USE 9 FOR FULLTEXT)
Modulation of Virulence Factor Expression by Pathogen Target Cell Contact

Pettersson, Jonas; Nordfelth, Roland; Dubinina, Elena; Bergman, Tomas; Gustafsson. Mikael; Magnusson, Karl Eric; Wolf-Watz, Hans J. Pettersson, R. Nordfelth, E. Dubinina, T. Berman, H. Wolf-Watz, Department of Cell and Molecular Biology, University of Umea, S-901 87 Umea, Sweden. ; M. Gustafsson and K. E. Magnusson, Department of Medical Microbiology, University of Linkoping, S-881 85 Linkoping, Sweden. Science Vol. 273 5279 pp. 1231

Publication Date: 8-30-1996 (960830)
Document Type: Journal ISSN: 0036-8075 Publication Year: 1996

Language: English

Section Heading: Reports
Word Count: 2535 (THIS IS THE FULLTEXT)

Abstract:

...LcrO, a negative regulator of Yop expression, via the Yop-type III secretion system. The intracellular concentration of LcrQ was thereby lowered, resulting in increased expression of Yops. These results suggest...

Text:

...B10) (B11) (B12) , which has a high level of homology with the corresponding systems of Salmonella and Shigella. These systems are functionally conserved, allowing both the secretion and translocation of Page 12

heterologous...

- ...proteins across the target cell membrane (B12) (B13) . Moreover, Shigella shows a target cell-induced response, manifested by the rapid release of the Ipa proteins to the culture medium (B14) (B15) , and Salmonella rapidly induces the formation of new surface structures upon cell contact (B16) . Thus, these three...
- ...monitor the level of gene expression in individual bacteria. We used the LuxAB protein of Vibrio harveyi as a reporter for transcription (B18) . This protein catalyzes a reaction emitting photons at...secretion of Yops (B2O) , and we speculated that LcrQ might be secreted to lower the intracellular concentration of LcrQ and thus derepress Yop expression. To study the localization of LcrQ, we...
- ...and C (822). Although the total amount of LcrQ is higher under inductive conditions, the intracellular concentration is lower when compared with noninduced bacteria, suggesting that the intracellular concentration of LcrQ is regulated by secretion...
 ...with Ca.sup(2+) to a medium without Ca.sup(2+). A decline in the intracellular concentration of LcrQ was observed as early as 3 min after the shift, and after...
- ...the bacteria (Fig. 4). Yop expression began to increase 5 to 7 min after the intracellular concentration of LcrQ started to decline (Fig. 4), showing that LcrQ secretion precedes the derepression...secretion channel at the zone of contact, and this event triggers LcrQ secretion. Consequently, the intracellular LcrQ concentration is lowered, leading to derepression of Yop expression. The export channels facing the
- ...striking similarities with a recent model presented for the regulation of the biosynthesis of the flagellum of Salmonella typhimurium (B23) . The regulation involves the negative regulator FlgM (anti- (final-sigma) .sup(28)), which is...
- ...the same secretion system (showing homology with the Ysc system) that mediates export of the flagellin subunits to the surface of the bacteria (823) . Preliminary results indicate that LcrQ is not...
- ...1% Triton X-100 for 5 min, and the total volume was collected for protein immunoblot analysis and viable bacteria count determination. The Yop expression was compared with a control culture... ...serial dilutions of the samples (cells +). The blots were developed with an Amersham ECL-protein immunoblot kit according to instructions from the manufacturer. The amount of protein used for the blot...

...Figure Removed

Figure F3
Caption: Intracellular concentration of LcrQ correlates with Yop expression. Overnight cultures grown at 26.Deg.C in...

- ...x 10.sup(7) bacteria, were separated on SDS-PAGE and analyzed by ECL protein immunoblotting as described (B25) . (A and B) Bacterial pellets from the wild type and the lcrQ...
- ...yccS (B21) mutants and (C) the supernatant from the wild type were analyzed by protein immunoblotting with antiserum recognizing all Yops [panel (A)] or recognizing LcrQ [panels (B) and (C)]. (DFigure Removed

Figure F4
Caption: Rapid decrease in the intracellular concentration of LcrQ
Page 13

after a shift from Ca.sup(2+)-containing to Ca.sup(2...

...to 5 x 10.sup(6) bacteria were analyzed by SDS-PAGE and ECL protein immunoblotting with antiserum recognizing all Yops or antiserum to LcrQ. The time after shift includes a...

References and Notes:

...3. Straley, S. C., Skrzypek, E., Plano, G. V., Bliska, J. B., Infect. Immun., 61 1993, 3105...

19/3,K/4 (Item 1 from file: 357) Links Derwent Biotech Res.

(c) 2008 Thomson Reuters. All rights reserved. 0378939 DBA Accession No.: 2005-24645 PATENT

Composition for stimulating immune system in subject against Listeria monocytogenes. has pathogen associated molecular pattern that activates TLR2 and TLR5, and distinct L. monocytogenes antigens pathogen associated molecular pattern for use in immune system induction

Author: POWELL T J: MEDZHITOV R M Patent Assignee: UNIV YALE; VAXINNATE CORP 2005
Patent Number: WO 200577408 Patent Date: 20050825 WPI Accession No.: 2005-582850 (200559) Priority Application Number: US 542739 Application Date: 20040206
National Application Number: WO 2005US3367 Application Date: 20050204 Language: English

Composition for stimulating immune system in subject against Listeria monocytogenes, has pathogen associated molecular pattern that activates TLR2 and TLR5, and distinct L. monocytogenes antigens pathogen associated molecular pattern for use in immune system induction

Abstract: ...activates at least one member chosen from TLR2 and TLR5, and at least two distinct Listeria monocytogenes antigens, is new. DETAILED DESCRÍPTION - A composition (I), comprises: (a) a pathogen associated molecular pattern...
...activates at least one member chosen from TLR2 and TLR5, and at least two distinct Listeria monocytogenes antigens; (b) a pathogen associated molecular District Lister ia monocytogenes antigens, (o) a patingen associated molecular pattern that activates at least one member chosen from TLR2 and TRL5, and L. monocytogenes antigen that is not listeriolysin; or (c) a pathogen associated molecular pattern that activates at least one member chosen from TLR2 and TLR5, and L. monocytogenes p60 antigens. INDEPENDENT CLAIMS are also included for: (1) composition (C1) comprising SEQ ID No....a pathogen associated molecular pattern that activates TLRZ or TLRS, at least two distinct L.monocytogenes antigens; (4) nucleic acid construct (III) encoding SEQ ID No: 12, SEQ ID No: 14....construct (V) encoding a pathogen associated molecular pattern that activates TLRZ or TLRS, and L.monocytogenes antigen that is not listeriolysin or L.monocytogenes p60

antigen; (7) a vector (VI) comprising (II) or (V); (8) a host cell (HI...) and antigen; (7) a vector (VI) comprising (II) or (V); (8) a host cell (HI...) and the same two distinct L. monocytogenes antigens, and isolating the fusion protein produced by the host cell; (b) culturing a host.....fusion protein including a pathogen associated molecular pattern that activates TIR2 or TIRS; and L. monocytogenes antigen that is not listeriolysin, and isolating the fusion protein produced by the host cellfusion protein including a pathogen associated molecular pattern that activates TLR2 or TLR5, and L. monocytogenes p60 antigen, and isolating the fusion protein produced by the host cell. BIOTECHNOLOGY - Preferred Composition: In (I), the pathogen associated molecular pattern and L.monocytogenes antigens are Components of a fusion protein. The pathogen associated molecular pattern activates a TLR2.....molecular pattern includes at least a fragment of SEQ ID No: 1 and the L. monocytogenes antigens include at least a fragment of each of SEQ ID No: 7 and SEQ.....ILRS signaling pathway. The pathogen associated molecular pattern is at least a fragment of a flagellin. The flagellin includes a polypeptide chosen from Helicobacter pylori, Vibrio cholera, Serratia marcesens, Shigella flexneri,

Treponema pallidum, Legionella pneumophilia, Borrelia burgdorferei, Clostridium difficile, Rhizobium meliloti, Agrobacterium tumefaciens, R.lupine, Bartonella clarridgeiae, Proteus mirabilis, Bacillus subtilus, L.monocytogenes, Pseudomonas aeruginosa and E.coli. The flagellin is chosen from Salmonella typhimum fljb and E.coli Flic. The S. typhimurium fljb includes at least a fragment of SEQ ID No. 5. The pathogen associated molecular....lipopeptides, outer membrane proteins (OMPS), outer surface proteins (OSPS), protein components of bacterial cell walls, flagellins, bacterial DNAS, single and double-stranded viral RNAS, unmethylated CpG-DNAs, mannans, mycobacterial membranes, and... ...molecular pattern includes at least a fragment of SEQ ID No: 3 and the L. monocytogenes antigens include at least a fragment of each of SEQ ID No: 7 and SEQ.....No: 7 and SEQ ID No: 8. The pathogen associated molecular battern and the i. monocytogenes p60 antigen are components of a fusion protein. (Cl) further includes at least one additional L monocytogenes antigen. The additional L monocytogenes antigen is listeriolysin. Preferred Construct: In (II), the antigens are encoded by the nucleic acid ..., No: 10. ACTIVITY - Antibacterial; Gastrointestinal-Gen. No supporting data is given. MECHANISM OF ACTION - Stimulates immune response (claimed). USE - (I) is useful for stimulating immune system in a subject (claimed) against L.monocytogenes causing gastroenteritis. ADMINISTRATION - (I) is administered orally, intravenously, intraperitoneally, subcutaneously or intramuscularly. No dosage given.(77 pages) E.C. Numbers:

Descriptors: pathogen associated molecular pattern composition, fusion protein, Listeria monocytogenes antigen activation, vector-mediated gene transfer expression in host cell, appl. gastroenteritis, immune system induction bacterium (24, 40)

19/3,K/5 (Item 2 from file: 357) Links Derwent Biotech Res.

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0377181 DBA Accession No.: 2005-22887 PATENT
Mucosal vaccine adjuvants for preventing infectious diseases, anticancer and for contraception, comprises bacterial flagellins, as active component bacterium flagellin and gene substitution for vaccine and disease therapy or prevention

Author: RHEE J H; LEE S E; KIM S Y

Patent Assignee: UNIV CHONNAM NAT 2005

Patent Number: WO 200570455 Patent Date: 20050804 WPI Accession No.: 2005-542230 (200555)

Priority Application Number: KR 1974 Application Date: 20040112

National Application Number: WO 2005KR103 Application Date: 20050112

Language: English

Mucosal vaccine adjuvants for preventing infectious diseases, anticancer and for contraception, comprises bacterial flagellins, as active component bacterium contraception, comprises bacterial flagellins, as active component bacterium flagellin and gene substitution for vaccine and disease therapy or prevention Abstract: DERWENT ABSTRACT: NOVELTY - Mucosal vaccine adjuvants (I), comprises bacterial flagellins, as an active component. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (I) producing (MI) immunogen having adjuvanticity by flagellin, involves substituting the genes encoding protein antigenepitopes for the genes between the N-terminal.....278-377 and FlaE of amino acid sequence 276-375 among the structural components of vibrio vulnificus set out in SEQ ID No. 1-12; and (2) mucosal vaccine adjuvants (II), comprising immunogens prepared by (MI), as an active component. BIOTECHNOLOGY - Preferred Adjuvant: In (I), the flagellins are originated from V. vulnificus. Salmonella typhinurium. Listeria flagellins are originated from V. vulnificus, Salmonella typhimurium, Listéria monocytogenes. The flagellins are chosen from flagellin proteins of V.vulnificus respectively. In (II), the adjuvants are for the anti-toxin vaccine against tetanus toxoid and so on, the live attenuated or killed vaccines against cholera, typhoid fever, the anti-viral vaccine against influenza, severe acute respiratory syndrome, the anti-cancer vaccines against uterine cervical cancer, the anti-sperm contraceptive vaccine or the recombinant protein or peptide vaccine. Preferred Method: In (M1), the protein antigen epitopes are tetanus toxoid, immunogenic epitopes of influenza virus, immunogenic epitopes of human papilloma virus that induces uterine cervical cancer, pneumococcal antigen PspA or sperm. ACTIVITY -

Antimicrobial; Cytostatic; Contraceptive. MECHANISM OF ACTION - Vaccine. The antigen specific systemic immune response and mucosal immune adjuvanticity of the recombinant flagellin was carried out as follows. Seven-week-old Balb/c mice were intranasally immunized 3 times with phosphate buffered saline (PBS), tetanus toxo or with combinations of 3 of tetanus toxoid (TT) and of Flaß of V.vulnificus (VV) at 7 day interval. Seven days after the last immunization, saliva, vaginal wash, and serum samples were collected to assess TT-specific systemic immune responses and mucosal immune responses. These responses were measured by enzyme linked immunosabnat assay (ELISA). The mice that were vaccinated 3 times before were observed for 7 days after systemic administration of 200 folds of lethal doses of (TT). Results indicated that the antigen specific systemic immune response and mucosal immune response was higher in the group of TT+VV-Flaß than that in the group ofvaccines that is useful for preventing infectious diseases, cancer, and also useful in contraception etc. ADMINISTRATION - (I) is administered by mucosal route (claimed), or by subcutaneous, intravenous, intramuscular or oral route. No dosage given. EXAMPLE - No relevant example is given. (21 pages)

Descriptors: Vibrio vulnificus, Salmonella typhimurium, Listeria monocytogenes flagellin, FlaA, FlaB, FlaF, FlaC, FlaD, FlaE gene substitution, human papilloma virus, influenza virus, severe-acute-respiratory-syndrome virus, antitumor vaccine, uterus cervix cancer live, attenuated, killed vaccine composition, anti-sperm contraceptive vaccine, recombinant protein, peptide vaccine, ELISA, immunization in mose, appl. infectious disease, cancer therapy, prevention bacterium papova virus onthomyxo virus_SARS virus corona virus analysis immunoassay DNA sequence protein

sequence (24, 37)

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OR ADMINIST? OR INTRA? OR ORAL)
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               S S15 AND RESPONSE
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               RD (unique items)
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               S S17 AND SALMONELLA
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               S S18 AND VIBRIO
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